

¹⁸⁴Au

Hansen et al. reported the first observation of ¹⁸⁴Au in the paper “Decay Characteristics of Short-Lived Radio-Nuclides Studied by On-Line Isotope Separator Techniques” in 1969 ([1969Ha03](#)). 600 MeV protons from the CERN synchrocyclotron bombarded a lead target and mercury was separated using the ISOLDE facility. Electron capture, β - and γ -rays were measured to identify ¹⁸²Au. The paper summarized the ISOLDE program and did not contain details about the individual nuclei other than in tabular form. The detailed analysis was published in reference ([1972Fi12](#)). The measured half-life of 47(3) s corresponds to an isomeric state. The ground state half-life of 21(1) s) was measured for the first time 28 years later by [1997Za03](#)). Earlier measurements of the ground state were only reported in conference proceedings ([1990Ed01,1992Ro21](#)).

Adapted from reference ([2010Sc35](#))

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